

KB 5050



ENTERED

PCT09

RAW SEQUENCE LISTING

DATE: 02/20/2003

PATENT APPLICATION: US/09/743,494

TIME: 14:56:02

Input Set : A:\50186.005001.SEQLIST.TXT

Output Set: N:\CRF4\02202003\I743494.raw

```

4 <110> APPLICANT: Bohnet, Karin
5      Huls, Christoph
6      Mullner, Stefan
8 <120> TITLE OF INVENTION: Genes of the DEAD Box Protein Family,
9      Their Expression Products and Use
12 <130> FILE REFERENCE: 50186/005001
14 <140> CURRENT APPLICATION NUMBER: US 09/743,494
15 <141> CURRENT FILING DATE: 2001-01-10
17 <150> PRIOR APPLICATION NUMBER: PCT/EP99/04892
18 <151> PRIOR FILING DATE: 1999-07-10
20 <150> PRIOR APPLICATION NUMBER: 198 32 783.8
21 <151> PRIOR FILING DATE: 1998-07-22
23 <160> NUMBER OF SEQ ID NOS: 16
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 16
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Primer
35 <400> SEQUENCE: 1
36 gttctaccat tctgtg                                     16
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 15
40 <212> TYPE: DNA
41 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <223> OTHER INFORMATION: Primer
46 <400> SEQUENCE: 2
47 acggttcggt aagac                                     15
49 <210> SEQ ID NO: 3
50 <211> LENGTH: 23
51 <212> TYPE: DNA
52 <213> ORGANISM: Artificial Sequence
54 <220> FEATURE:
55 <223> OTHER INFORMATION: Primer
57 <400> SEQUENCE: 3
58 atagaattcc cacagagaat gct                             23
60 <210> SEQ ID NO: 4
61 <211> LENGTH: 25
62 <212> TYPE: DNA
63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 02/20/2003

PATENT APPLICATION: US/09/743,494

TIME: 14:56:02

Input Set : A:\50186.005001.SEQLIST.TXT

Output Set: N:\CRF4\02202003\I743494.raw

```

66 <223> OTHER INFORMATION: Primer
68 <400> SEQUENCE: 4
69 ataggatccg ttctaccatt ctgtg 25
71 <210> SEQ ID NO: 5
72 <211> LENGTH: 40
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: Primer
79 <400> SEQUENCE: 5
80 ataagaatgc ggccgctgtt ctaccgattc tgtgaatata 40
82 <210> SEQ ID NO: 6
83 <211> LENGTH: 41
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Primer
90 <400> SEQUENCE: 6
91 cgcggtatcct cactgggttcg ggtaagactg ctactttctc t 41
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 41
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Primer
101 <400> SEQUENCE: 7
102 cgcggtatcct cactgggttcg ggtaagactg ctactttctc t 41
104 <210> SEQ ID NO: 8
105 <211> LENGTH: 40
106 <212> TYPE: DNA
107 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Primer
112 <400> SEQUENCE: 8
113 ataagaatgc ggccgcgttc taccgattct gtggacatag 40
115 <210> SEQ ID NO: 9
116 <211> LENGTH: 16
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Primer
123 <400> SEQUENCE: 9
124 gttctaccat tctgtg 16
126 <210> SEQ ID NO: 10
127 <211> LENGTH: 15
128 <212> TYPE: DNA
129 <213> ORGANISM: Artificial Sequence
131 <220> FEATURE:
132 <223> OTHER INFORMATION: Primer

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,494

DATE: 02/20/2003

TIME: 14:56:02

Input Set : A:\50186.005001.SEQLIST.TXT
 Output Set: N:\CRF4\02202003\I743494.raw

```

134 <400> SEQUENCE: 10
135 acggttcggt aagac
137 <210> SEQ ID NO: 11
138 <211> LENGTH: 23
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: Primer
145 <400> SEQUENCE: 11
146 atagaattcc cacagagaat gct
148 <210> SEQ ID NO: 12
149 <211> LENGTH: 25
150 <212> TYPE: DNA
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Primer
156 <400> SEQUENCE: 12
157 ataggatccg ttctaccatt ctgtg
159 <210> SEQ ID NO: 13
160 <211> LENGTH: 771
161 <212> TYPE: DNA
162 <213> ORGANISM: Tetrahymena thermophila
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Primer
167 <400> SEQUENCE: 13
168 cccactagag aactcgctat gcaaatcgaa agagagtccg aaagatttgg taaatcctct 60
169 aagcttaaat gtgcttgat ctatggtggt gctgacaaat actcctaaag agcacttctc 120
170 caataaggtg tagatgtagt tattgctact cctggtagac ttattgactt tttagaaagt 180
171 gaaactacta ctttacgtag agttacttat ctcgatttag atgaagcaga tagaatgtta 240
172 gatattgggt ttgaaattta aattagaaaa atcttgggtt aaattagacc tgatcggtta 300
173 acattgatgt tttctgctac ctggcctaag aatgtttaga atcttgctta agattattgc 360
174 aagaatactc cgtttatgt tcaaatcgga aaacatgaat tagctattaa cgaaagaatt 420
175 aaataaattg tttatgttac agatcaatca aagaaaatca atcaacttat caagcaatta 480
176 gattgtttga cttagaaaga taaagtattg attttcgctt aaacaaagaa gggatgtgaa 540
177 agcatgagtc gtattttgaa taaagaagga tttaatgttc ttgctatcca tggtagacaa 600
178 gcctaaaaag acagagacta tgttatgaac aagttcaaaa gcggagaatg cagaatcctt 660
179 attgctacag acgtagccag tagaggtttg gatgttaagg atgtctccca cgtatttaat 720
180 tacgatttcc caaagttat ggaagactat gtccacagaa tcggtagaac g 771
182 <210> SEQ ID NO: 14
183 <211> LENGTH: 257
184 <212> TYPE: PRT
185 <213> ORGANISM: Tetrahymena thermophila
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Primer
190 <400> SEQUENCE: 14
191 Pro Thr Arg Glu Leu Ala Met Gln Ile Glu Arg Glu Ser Glu Arg Phe
192 1 5 10 15
193 Gly Lys Ser Ser Lys Leu Lys Cys Ala Cys Ile Tyr Gly Gly Ala Asp
194 20 25 30

```

RAW SEQUENCE LISTING

DATE: 02/20/2003

PATENT APPLICATION: US/09/743,494

TIME: 14:56:02

Input Set : A:\50186.005001.SEQLIST.TXT

Output Set: N:\CRF4\02202003\I743494.raw

```

195 Lys Tyr Ser Gln Arg Ala Leu Leu Gln Gln Gly Val Asp Val Val Ile
196      35      40      45
197 Ala Thr Pro Gly Arg Leu Ile Asp Phe Leu Glu Ser Glu Thr Thr Thr
198      50      55      60
199 Leu Arg Arg Val Thr Tyr Leu Val Leu Asp Glu Ala Asp Arg Met Leu
200 65      70      75      80
201 Asp Met Gly Phe Glu Ile Gln Ile Arg Lys Ile Leu Gly Gln Ile Arg
202      85      90      95
203 Pro Asp Arg Gln Thr Leu Met Phe Ser Ala Thr Trp Pro Lys Asn Val
204      100      105      110
205 Gln Asn Leu Ala Gln Asp Tyr Cys Lys Asn Thr Pro Val Tyr Val Gln
206      115      120      125
207 Ile Gly Lys His Glu Leu Ala Ile Asn Glu Arg Ile Lys Gln Ile Val
208      130      135      140
209 Tyr Val Thr Asp Gln Ser Lys Lys Ile Asn Gln Leu Ile Lys Gln Leu
210 145      150      155      160
211 Asp Cys Leu Thr Gln Lys Asp Lys Val Leu Ile Phe Ala Gln Thr Lys
212      165      170      175
213 Lys Gly Cys Glu Ser Met Ser Arg Ile Leu Asn Lys Glu Gly Phe Lys
214      180      185      190
215 Cys Leu Ala Ile His Gly Asp Lys Ala Gln Lys Asp Arg Asp Tyr Val
216      195      200      205
217 Met Asn Lys Phe Lys Ser Gly Glu Cys Arg Ile Leu Ile Ala Thr Asp
218      210      215      220
219 Val Ala Ser Arg Gly Leu Asp Val Lys Asp Val Ser His Val Phe Asn
220 225      230      235      240
221 Tyr Asp Phe Pro Lys Val Met Glu Asp Tyr Val His Arg Ile Gly Arg
222      245      250      255
223 Thr
227 <210> SEQ ID NO: 15
228 <211> LENGTH: 765
229 <212> TYPE: DNA
230 <213> ORGANISM: Tetrahymena thermophila
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Primer
235 <400> SEQUENCE: 15
236 cccaccagag aattagccca ataaactatc accggttatta tgtacttagg tgaattcttg 60
237 aaggtctccg cctatgcttg cactggtggt actgatccca aggaagatag aaagagatta 120
238 agagaaggtg tccaagtcgt tgttggtacc cctggtagag ttttgattt aatctaaaag 180
239 aagactttag tcaccgatca cttaaaatta ttcatttttg acgaagccga tgaaatgta 240
240 ggaagaggtt tcaaggatca aattaacaaa atcttctaaa acttacccca cgatatctag 300
241 gttgctcttt tctctgctac catggctccc gaaattcttg aaattaccaa gtaatttatg 360
242 agagaccccg ctactatcct tgtcaagaat gatgacttga ctttgacgg tattaataa 420
243 ttctacatcg cctagataa ggaagaatg aagtttgaca ccttagtcga attatacaat 480
244 aacatcgaaa tcgcttaagc tattatctat tgcaacacca agaagagagt cgatgaatta 540
245 agagacaagc ttattgaaaa gaatatgacc gtctctgcta tgcacggtga aatggaccaa 600
246 taaaacagag atcttattat gaaggaattc agaaccggtta cctccagagt tcttatcact 660
247 actgatttgc tctccagagg tattgatatc catcaagtca acttggttat caactacgac 720
248 ttaccacctta agaaggaatg ttatattcac agaatcggtga gaaca 765

```

RAW SEQUENCE LISTING

DATE: 02/20/2003

PATENT APPLICATION: US/09/743,494

TIME: 14:56:02

Input Set : A:\50186.005001.SEQLIST.TXT

Output Set: N:\CRF4\02202003\I743494.raw

```

250 <210> SEQ ID NO: 16
251 <211> LENGTH: 255
252 <212> TYPE: PRT
253 <213> ORGANISM: Tetrahymena thermophila
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Primer
258 <400> SEQUENCE: 16
259 Pro Thr Arg Glu Leu Ala Gln Gln Thr Ile Thr Val Ile Met Tyr Leu
260 1 5 10 15
261 Gly Glu Phe Leu Lys Val Ser Ala Tyr Ala Cys Thr Gly Gly Thr Asp
262 20 25 30
263 Pro Lys Glu Asp Arg Lys Arg Leu Arg Glu Gly Val Gln Val Val Val
264 35 40 45
265 Gly Thr Pro Gly Arg Val Leu Asp Leu Ile Gln Lys Lys Thr Leu Val
266 50 55 60
267 Thr Asp His Leu Lys Leu Phe Ile Leu Asp Glu Ala Asp Glu Met Leu
268 65 70 75 80
269 Gly Arg Gly Phe Lys Asp Gln Ile Asn Lys Ile Phe Gln Asn Leu Pro
270 85 90 95
271 His Asp Ile Gln Val Ala Leu Phe Ser Ala Thr Met Ala Pro Glu Ile
272 100 105 110
273 Leu Glu Ile Thr Lys Gln Phe Met Arg Asp Pro Ala Thr Ile Leu Val
274 115 120 125
275 Lys Asn Asp Asp Leu Thr Leu Asp Gly Ile Lys Gln Phe Tyr Ile Ala
276 130 135 140
277 Leu Asp Lys Glu Glu Trp Lys Phe Asp Thr Leu Val Glu Leu Tyr Asn
278 145 150 155 160
279 Asn Ile Glu Ile Ala Gln Ala Ile Ile Tyr Cys Asn Thr Lys Lys Arg
280 165 170 175
281 Val Asp Glu Leu Arg Asp Lys Leu Ile Glu Lys Asn Met Thr Val Ser
282 180 185 190
283 Ala Met His Gly Glu Met Asp Gln Gln Asn Arg Asp Leu Ile Met Lys
284 195 200 205
285 Glu Phe Arg Thr Gly Thr Ser Arg Val Leu Ile Thr Thr Asp Leu Leu
286 210 215 220
287 Ser Gly Gly Ile Asp Ile His Gln Val Asn Leu Val Ile Asn Tyr Asp
288 225 230 235 240
289 Leu Pro Leu Lys Lys Glu Cys Tyr Ile His Arg Ile Gly Arg Thr
290 245 250 255

```

VERIFICATION SUMMARY

DATE: 02/20/2003

PATENT APPLICATION: US/09/743,494

TIME: 14:56:03

Input Set : A:\50186.005001.SEQLIST.TXT

Output Set: N:\CRF4\02202003\I743494.raw